

GINZBURG, B. Ya. (Co-author)

~~SECRET~~

Gintsburg, B. Ya. and Kluz, B. L. "Technological calculations of piston rings for corrected pressure," in the collection: Dinamika i prochnost' aviadvigateley, Moscow, 1949, p. 81-99, - Bibliog: 5 items.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515120014-2
GINZBURG, B. Ya. APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515120014-2"

Fitting bearings into beds. B. Ya. Ginzburg. Vest. mash., 31, No 12,
1951.

GINZBURG, D.A.

11 "

The olfactory-humoral reflex in lead and mercury poisoning. L. G. Oshynskaya and D. A. Ginzburg (Inst. Hyg. Inst. Acad. Med. Sci., Moscow: *Trud. Zhur. S.S.S.R.* 38, 105-106 (1932)). — The olfactory-humoral reflex is defined as the change of the biol. activity of blood (test with isolated frog heart after stimulation with thymol or oil of rosemary; the blood is taken from a normal subject, then repeated after inhalation of the olfactory irritants). Workers with Pb or Hg poisoning show enhanced olfactory-humoral reflex, i.e. the blood activity rose after stimulation. In case of Pb the reflex varies inversely with the gravity of poisoning and the frog heart test shows a decrease of amplitude and frequency of the heart beat. In lead colic the effect is in opposite direction. In Hg poisoning usually the reflex is greatly increased. Coating of the nasal mucosa with procaine leads to disappearance of the reflex. G. M. Kosolapoff

DROGICHINA, E.A.; OKHNYANSKAYA, L.G.; GINZBURG, D.A.; MUMZHU, Ye.A.;
SADCHIKOVA, M.N.; RYZHKOVA, M.N.

Role of the higher sections of the central nervous system in the
development and course of the pathological process in some intoxi-
cations. Trudy AMN SSSR 11:9-27 '54. (MLBA 7:10)
(Nervous system) (Industrial toxicology)

GINZBURG, D.A. (Moskva)

Study of the biological activity of blood in some occupational diseases. Gig. truda i prof.zab. 5 no.6:50-52 Ja '61. (MIRA 15:3)

1. Institut gigiyeny truda i professional'nykh zabolevaniy
AMN SSSR.

(BLOOD)
(OCCUPATIONAL DISEASES)

DROGICHINA, E. A.; SADCHIKOVA, M. N.; GINZBURG, D. A.; CHULINA, N. A.
(Moskva)

Some clinical manifestations of the chronic effect of centimeter waves. Gig. truda i prof. zab. no.1:28-34 '62.
(MIRA 1:2)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.

(ELECTROENCEPHALOGRAPHY)
(MICROWAVES—PHYSIOLOGICAL EFFECT)

L 16172-62

INT(1)/INT(3)/EUC/ES(1) AFFIC/ASD AR/K

ACCESSION NR: AT3003066

S/2939/62/000/003/0035/0047

AUTHOR: Ginzburg, D. A.

TITLE: Effect of radioactive iron on bioelectric activity of the cerebral cortex under prolonged experimental conditions

SOURCE: Materialy po toksikologii radioaktivnykh veshchestv, no. 3; Zhelazo-59. Moscow, Medgiz, 1962, 35-47

TOPIC TAGS: Fe sup 59, cerebral cortex, bioelectrical activity, rhythmic photostimulation, sensory motor area, parieto-occipital area

ABSTRACT: Fe⁵⁹ (10 microcuries/kg) was administered orally to an experimental group of rabbits over 3 mos while a stable iron isotope was given to a control group. Electrodes were placed in the cerebral cortex sensory-motor and parieto-occipital areas to measure bioelectrical activity and responses to rhythmic photostimulation (frequency 2-20/sec). It was found that there are no substantial shifts in the bioelectrical activity of the experimental or control groups. After 3 to 5 weeks animals who received Fe⁵⁹ display changes in their reaction to rhythmic photostimulation. These changes are characterized by a widening in the rhythm tracking range to the right with the

Card 1/2

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ACCESSION NR: AT3003066

appearance of an "attached" (navyazannaya) rhythm at a higher photo-stimulation frequency of 13-15/sec and by tracking waves on the E. O. G. for the sensory-motor cortex areas. The appearance of high frequency tracking on the E. O. G. for the sensory-motor areas with simultaneous registration of doubled and quadrupled transformed rhythms in the occipital areas of the cortex is proof against a transcortical mechanism of tracking wave propagation into the anterior brain sections. It is more probable that the transmission into the anterior sections of the cortex comes directly from the subcortex switching of the optic track. Orig. art. has: 8 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 25 Jun 63

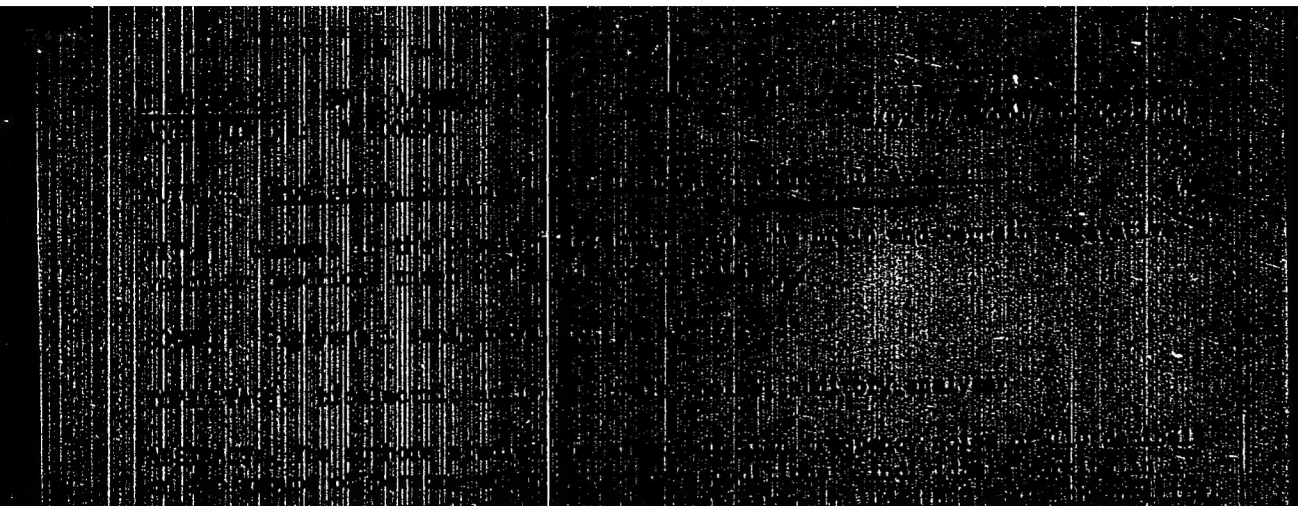
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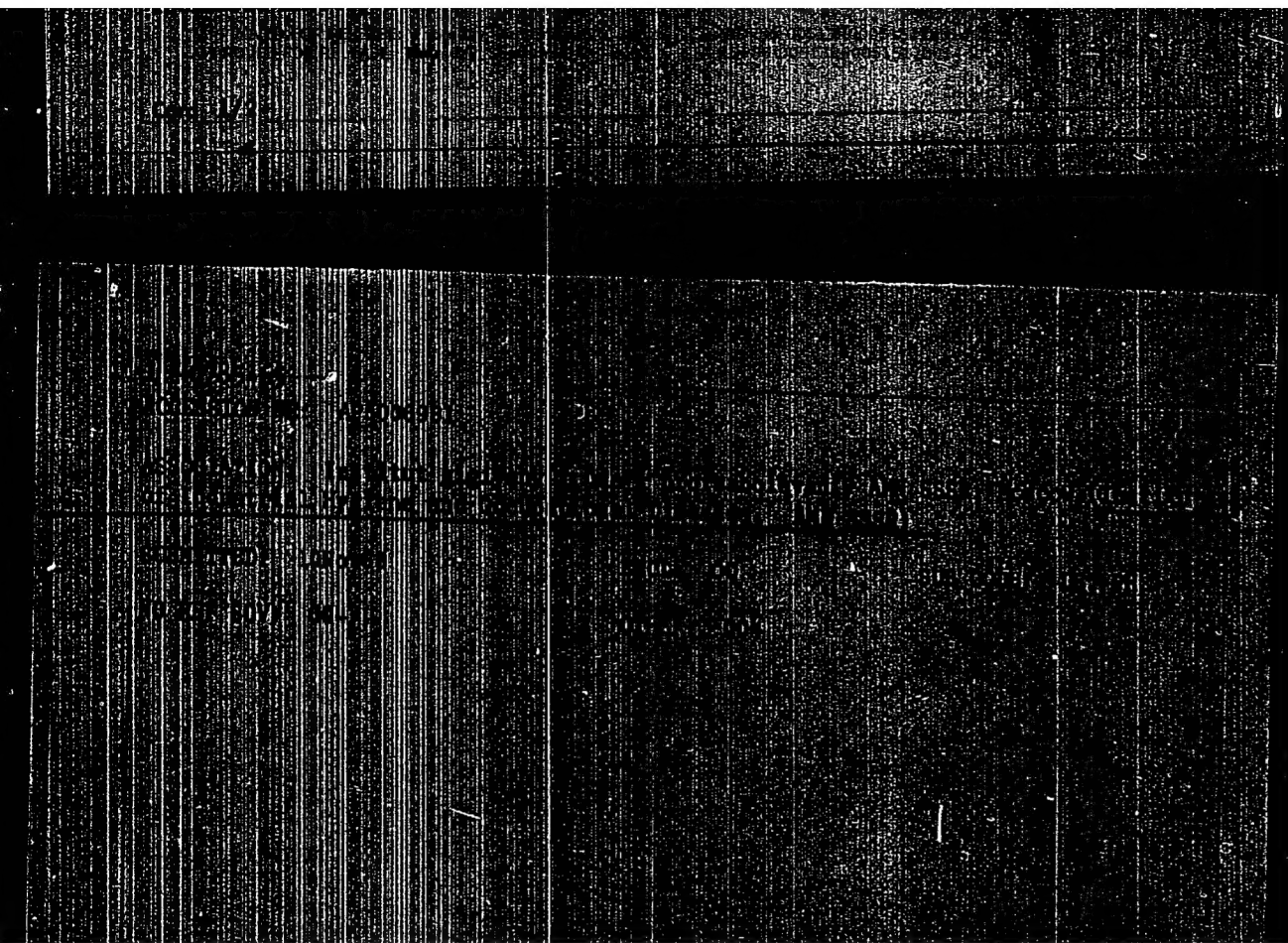
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NO REF SOV: 029

OTHER: 005

Card 2/2







GINZBURG, D. B.

FACTS AND PROPERTIES

THE AND STIMULATING

Using various kinds of fuel in glass furnaces, their equivalents, and the problem of nonuniform flame heating. D. P. Chilikov. *Korov. i Staklo* 11, No. 3, 20-28 (1935).—Data are given on the composition and properties of various fuels for glass furnaces used in U. S. S. R. M. V. Kondchik.

434 114 METALLURGICAL LITERATURE CLASSIFICATION

1987-1988

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A - 1

The thermodynamic equilibrium distribution of organic acids for
 their isomers in aqueous mixed solutions N. Iermolovskii and
 A. I. Kiselev, *Chem. Abstr.*, 1962, 56:23769. The ad-
 equacy of model compounds of CH_3COOH (I), $\text{CH}_3\text{COOCH}_3$
 (II), and $\text{CH}_3\text{COOCH}_2\text{CH}_3$ (III) to form $\text{C}_2\text{H}_5\text{COOH}$ from H_2O -
 (IV), $\text{C}_2\text{H}_5\text{COOCH}_3$ (V), and $\text{C}_2\text{H}_5\text{COOCH}_2\text{CH}_3$ (VI) and the assumption of $\text{C}_2\text{H}_5\text{COOH}$
 (IV), (V), and in H_2O and $\text{C}_2\text{H}_5\text{COOCH}_3$ (V), (VI) of H^+ (VII) - $\text{C}_2\text{H}_5\text{COOH}$.
 The assumption that H_2HCO_3 - $\text{C}_2\text{H}_5\text{COOH}$ mixtures has a min. approx.
 corresponding with the max. of the mol. polarization, with
 the other points are present in the curves for other solvent
 mixtures. For $\text{C}_2\text{H}_5\text{COOH}$ the order is $\text{H}_2\text{O} > \text{C}_2\text{H}_5\text{COOCH}_3 >$
 $\text{C}_2\text{H}_5\text{COOCH}_2\text{CH}_3$, for $\text{C}_2\text{H}_5\text{COOCH}_3$ it is $\text{C}_2\text{H}_5\text{COOCH}_3 > \text{C}_2\text{H}_5\text{COOCH}_2\text{CH}_3 >$
 $\text{C}_2\text{H}_5\text{COOH}$, and for $\text{C}_2\text{H}_5\text{COOCH}_2\text{CH}_3$ it is $\text{C}_2\text{H}_5\text{COOCH}_2\text{CH}_3 > \text{C}_2\text{H}_5\text{COOCH}_3$. The ad-
 equacy of model compounds CH_3COOH (I), $\text{CH}_3\text{COOCH}_3$ (II),
 mixtures had min. in other solutions.

METALLURGICAL LITERATURE CLASSIFICATION

1997년 12월 15일

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THE UNIVERSITY OF CHICAGO PRESS

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PROCESSING AND PROPERTIES INDEX

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Gasification of fuel in the glass industry. D. H. Ginzburg. *Shtet'nyye Prom.* 1939, No. 8-9, 21-27; *Khim. Refrat. Zhur.* 1940, No. 2, 95.—Natural gas, mixed generator gas, water gas, gas produced by underground gasification of coal and from gasification of peat, anthracite and coke can be used as fuel in the glass industry. Diagrams of gas generators and of some other app. are given.
W. R. Hearn

ASH-GLA METALLURGICAL LITERATURE CLASSIFICATION

1939-1940

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GINZBURG, D. B.
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515120014-2
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515120014-2"

Kilns in the silicate industry; textbook
Moskva, Gos. ind-vo legkoi promyshl., 1940. 527 p. (49-55412)

TP847.G43

Glass furnaces

Monkva. Gos. izd-vo legkoi promyshl. 1941. 459 p. (49-55880)

TP858.G44 1941

Construction of a continuous batch furnace for making neutral glass. D. B. CHIRKUNOV AND V. P. SOROKIN. *Trudy Mashin. KHM. Yuzh. Mendeleva*, 1960, No. 8, pp. 60-60; *Khm. Referat. Zhur.*, 6 [7-8] 60 (1961).—The authors describe the rebuilding of a glassmelting furnace according to their plans. After the rebuilding, the yield per 1 sq. m. of surface was 470 kgm. instead of the 210 kgm. formerly obtained. The cost of fuel was lowered accordingly. See "Rationalization . . ." *Ceram. Abs.*, 19 [3] 64 (1960). M.H.

APPROVED FOR RELEASE: Thursday, September 20, 2002 CIA-RDP86-00513R000515120014-2

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Construction of gas-generating installations and improving their performance in wartime. D. B. Ginzburg
Lefyays Prem. 7, No. 5/6, 21 3(1942) M. Tishch

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ADDITIONAL METALLURGICAL LITERATURE CLASSIFICATION

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APPROVED FOR RELEASE: Thursday, September 26, 2002

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APPROVED FOR RELEASE: Thursday, September 26, 2002

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Performance of gas generators in the glass industry
H. H. GUNDEL, Standard Glass Co., Akron, Ohio, 1944.
NA 3, 1945, 1946-47, discusses the various fuels used for
generating gas and their effect on the quality and quantity
of the glass produced. M. H.

21

Simplified installation for producing high-calorific gas from local fuels. D. H. Gumburg. *Nikol'skaya Kmet.* From 1944, No. 6, 12-14. This periodic gas producer, air is forced upwards through the burning layer of fuel and also into the upper layers of the fuel where the temp. is sufficiently low (400-600°); the combustion gases are let out into the atm. Steam is then forced into the middle section of the fuel layer until the water gas begins to decomp. The water gas is cleaned in a water scrubber prior to use. A diagram of the gas producer is given. It can utilize wood, peat, anthracite, or coke. B. Z. Kamich

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Small tank furnaces. D. H. GINBURG. *Shtrokovaya i Krasn. Prom.*, 1946, No. 1-2, pp. 3-4. Problems dealing with the construction and use of small tank furnaces (area of glass surface up to 30 to 30 m²) are discussed. Such continuous furnaces are coming into more use in the Soviet Union for the manufacture of chemical, neutral, colored, and other special glasses. The withdrawal of glass from such tanks should be made from a considerable depth. It is necessary to eliminate the canal which joins the melting and refining basins and also the boats in the melting part of the furnace. The following constructions are recommended: (1) a throat which can be closed by a cock or by a boat which will make it possible to regulate the depth at which the glass is to be withdrawn and to make changes during operations, (2) a throat which can be closed by a boat that can be changed during operations and which will make it possible to dispense with the construction of an intermediate bridge wall, and (3) a bridge wall with openings, which is cooled by water. The coefficient of flow should be reduced by using throats of low height or by decreasing the depth of the refining part. Burners at the ends of the furnaces are preferred to those on the sides. The recuperative method of heating should be used when the fuel is liquid or gas.

B.Z.K.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

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Furnaces with unidirectional movement of the glass.
D. B. GINERBERG. *Sobol'nyye i Keram. Prom.*, 1946, No
7-8, pp. 7-8. A schematic diagram is given of an ideal
furnace having the following characteristics: (1) Each sec-
tion is higher than the following section, and the construc-
tion of thresholds makes it impossible for the glass mass to
flow back. (2) The sections for melting, firing, and work-
ing are separated and are heated independently. (3)
Homogenization of the mass is to be improved by means of
a stirring device in a special section of the furnace. (4)
The level at which the glass is to be withdrawn from the
firing and homogenization zones is to be regulated.
B. Z. K.

ASB-564 METALLURGICAL LITERATURE CLASSIFICATION

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7-11-4

Utilization of heat in glassmelting furnaces. D. B. GINERUNG. *Steklo i Keram. Prom.*, 1947, No 2, pp. 9-12. The equation of the heat balance of the whole furnace is $G = \frac{P_n + W}{Q_1 - K_1 Q_1}$, where G = consumption of fuel in cu. m./hr. or kg./hr. for each sq. m. of total area (or melting section) of the furnace; Q_1 = effective quantity of heat in kg.-cal. introduced by 1 cu. m. of combustible gas into the transfer valve; K_1 = part of Q_1 (0.2 to 0.4) lost with the outgoing gases; P_n = output of glass in kg. m²/hr. for the whole surface (or melting section) of the furnace; n = consumption of heat in kg.-cal./kg. necessary to obtain the glass melt; and W = loss of heat by the whole furnace (to the surrounding medium, referred to 1 sq. m. of the total (or melting section) surface of the furnace).

B. Z. K.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

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Heat conductivity of glass mass. D. H. Ginzburg, *Nekhotnyye Keram. Prom.*, 1947, No 7, pp. 9-11. G. investigated the heat conductivity of a glass mass in the absence of convection currents, radiation of flame and of setting was utilized. Glass plates were placed on a water calorimeter surrounded by a compensating cooler. Platinum-platinum-rhodium thermocouples made of 0.1-mm wire were placed in grooves etched in the plates. The temperature in the contact plane between the lower surface of the plate and the calorimeter was measured by a copper-constantan thermocouple brazed into the cover of the calorimeter. The chamber above the plates was heated with city gas. Compressed air or oxygen was fed into the burners. The temperature of the fire chamber was measured by a platinum-platinum-rhodium thermocouple housed in a thin protective casing. The coefficient of heat conductivity of the molten glass under these conditions for technically transparent glasses at 1000° to 1300° was 2 to 2.5 kg-cal/m-hr. For plate thickness h , upper layer thickness x , heat from chamber (Q_{ch}), heat from calorimeter (Q_{cal}), current temperature of glass T , heat conductivity coefficient k , and average value of coefficient k \bar{k} ($\bar{k} = kx$), the distribution of the temperature in the layer of glass is expressed by the following integral.

$$\lambda \frac{d^2 T}{dx^2} + k \left[(Q_{ch} - Q_{cal}) e^{-\frac{h-x}{\lambda}} + \int_0^x T_{ch} e^{-\frac{h-x}{\lambda}} dx - \int_0^x T_{cal} e^{-\frac{h-x}{\lambda}} dx \right] = 0$$

ASH-SLA METALLURGICAL LITERATURE

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USSR/Glass Manufacturing 4413.0600

Sep 1947

"Influence of Moisture and Size of Fuel Pieces on
Quality of Gas and Productivity of Gas Generators,"
Prof. D. B. Ginsburg, 42 pp

"Stek 1 Karam Prom" No 9

Discusses zones in gas generator, composition and
quantity of gases emerging from carburation region,
heat exchange in preparation zone, composition of
gas and size of gas generators during gasification
of wood, peat, coal, brown coal, anthracite and
coke. Detailed mathematical computations and
graphs.

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19

Fuel consumption in glass-melting furnaces. D. H.
Ginsburg. *Laysays From*. 7, No. 10, 18-21(1947).
The engineering aspects of combustion of various fuels and -
heat losses from glass-melting furnaces are discussed in
detail. Marshall Sittig

ASME-ALA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

EXISTING OR NEW SET

10000 00

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Gas producers and the use of gas in the glass and ceramic industries
Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1948. 203 p. (50-38739)

TP762.G5

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Glassmelting Furnaces (Steklovarennyye pechi). D. B. GINSBERG. Published by Gilepprom, Moscow and Leningrad, USSR, 1948. 404 pp. with illustrations. Price 10 rubles. The text covers thermophysical principles of operation, conditions, construction, calculation, service, control, and methods of investigation of glassmelting furnaces. New construction ideas are reflected. B Z K

ASD-55A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNOBISH

NUMBER 24

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EDITION

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of convection currents and to retain the slow moving glasslike layer at the bottom. The meter has its own regenerators. A stream of gases, such as oxygen or compressed air, exits and directs the burning gases at a speed of 100 to 200 m/sec upon the oblique surface of the charge so that the melt flows in a thin layer into the section for degassing. The degassing and cooling zones are separated by a threshold to reduce the height of the moving layer and to decrease return flow of the melt from the cooling layer and to decrease return flow of the melt from the cooling section. A vertically adjustable water cooled tube is placed near the threshold to reduce wear and to regulate return flow of the melt. Small thresholds are placed on the bottom to reduce currents of melt on the bottom. Good control in the degassing zone is obtained by constructing separate regenerators at the individual burners. A shield reduces heat transfer from the degassing zone into the cooling section, in the gas space. Curves and sketches

R/K

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ABSTRACT METALLURGICAL LITERATURE CLASSIFICATION

REF ID: A66844

1947年10月1日

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PAULINE CHAMBERLAIN

Heat processes in glassmelting furnaces. D. B. GINZBURG, *Sibbo i Kovun*, 3 [8] 14-16 (1948). Heat processes during glassmelting, degassing, and cooling are discussed. The process of glass formation takes place on the surface layer of the charge; the glass melt flows down, thus permitting the underlayers of the charge to melt in turn. The chief factor governing the rate of glass formation is the temperature. For successful degassing it is necessary to maintain high temperatures in the degassing zone. There are not sufficient grounds to warrant increasing the extent of cooling of the glass mass to accomplish complete fining of the glass. Factors influencing the dimensions of the melting zone of the tank furnace are reviewed.

B Z K

ASAC-320 METALLURGICAL LITERATURE CLASSIFICATION

4100 217 41100

Figure 6.

REPLY OF THE GOV. AS

22

Recent Translations of Russian Papers of Interest to the Glass Industry. *Glass Industry*, v. 29, Dec. 1946, p. 698-699, 722.

Condensations of three papers from *Steklo'naya i Keramicheskaya Promyshlennost* (Glass and Ceramic Industry): "Carborundum Saws for Glass," K. T. Bondarev (no. 1, 1947, p. 16); "Heat Conductance of Some Glasses," D. B. Ginzburg (no. 7, 1947, p. 9); and "Nograms for the Viscosity of Glass," M. V. Okhotin (no. 11, 1947, p. 8).

1. **ARTICULAR LITERATURE CLASSIFICATION**

FROM COMNAV
SUBJ: THE COMNAV ADV

Gilberg, L. G. and Gilberg, D. B. - "The importance of the still alive and economy of 1961," Trudy Tekhn. Konstr. i Tekhn. Tekhn., 1961, No. 1, p. 1-3.

SO: U-3462, 11 JUL 63. (Kievsk. Zhurnal Inzh. Stroy, No. 1, 1963).

GINZBURG, D. B.

23290. K istorii teplo tekhniki v stekol'noy promyshlennosti. Steklo i keramika,
1949, No. 6, s.1-5

SC: IETCFIS' NO. 31, 1949

In this periodic gas producer, air is forced upwards through the burning layer of fuel and also into the upper layers of the fuel where the temperature is sufficiently low ($400-600^{\circ}$); the combustion gases are let out into the atmosphere. Steam is then forced into the middle section of the fuel layer until the water gas begins to decompose. The water gas is cleaned in a water scrubber prior to use. A diagram of the gas producer is given. It can utilise wood, peat, anthracite, or coke.

[illegible]

"The Gasification of Low-Grade Fuel (Gazifikatsiya Nizkosortnoyo Topliva)
/Stroypromizdat, 1950.

C

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Recuperative furnaces in auxiliary processes of glass manu-
facture. D. B. Ginzburg. *Lezhaya Prom.*, 10 (10) 20 20
(1950).--A circular furnace is fired by regenerator gas. Gas
enters a partial combustion chamber in the central section of the

furnace while air, which is heated in the recuperator, enters the
chamber tangentially at the periphery at a speed of 2 m. sec.
From the partial combustion chamber, the gas air mixture passes
into the working chamber where the semifinished glass shapes
are heated. The furnace is compact and easy to operate and
service. 2 figures.

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ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Laboratory flame furnaces for firing ceramic mixes and
for glassmelting. D. B. Olsburg and A. T. Gel'man.
Steklo i Keram. 7, No. 8, 16-18(1980); cf. *C.A.* 43, 5013g.—
Illustrated descriptions of furnaces with rotary bottom, for
temps. up to 1550°, light lining and simple metal recu-
perator, for temps. up to 1630°, and needle-like recu-
perator, for temps. up to 1780°. B. Z. Kamich

Material

B. 11

Gas supply for tunnel kilns for firing building bricks. D. H. Olin-
burg (Ind. Assoc., 1940, 7, 11; Brit. Assoc. Adv., 1941, 1942).
Normal producer gas is used for melting glass and firing ceramic
ware is too costly and has too high a calorific value for firing building
bricks at temp. < 1000°. A simple gas producer using low-grade
fuels, e.g., peat and coal, for manufacture of cheap producer gas
of low calorific value is proposed. Brit. Ceram. Res. Ass. (C)

67WZ BUREAU

U.S. K...

Investigation of measures for the production of liquid
nitrogen in the laboratory. Walter J. Kern.
Chem. Eng. Prog., 56, 11, 1956, 11-12, 13-14 (in J. Am.
Chem. Soc.). A laboratory survey was made of a
distilling furnace and a liquefying furnace. Low cost of heat with
oil and gas was obtained. Heat consumption was 800,
000 Btu/hr. for the liquefying furnace, with gas of CO, 5.0,
O₂, 0.2, CO₂, 1.0, H₂, 1.0, CH₄, 1.0, and N₂ 65.8%. The coeff.
of expansion was 1.27 in the liquefying furnace and 0.13 in the
distilling furnace. A proposed measure to increase ca-
pacity is reduction of the liquefying furnace to raise the temp.
in the preheating zone and of the distilling furnace to per-
mit movement of the blocks on their sides. R. D. H.

[Handwritten signature]

1978. An examination of the thermal schedule of glass tank and an annealing furnace in the production rolled glass. D.B. Ginzburg, V.I. Vanin, E.V. Podorov, and A.A. Spridenov (Stek. Keram., 8, No. 11, 8, 1951).

An examination of working conditions in a glass tank andlehr in a Russian plant carried out by a team of students. Much is criticized and many hints for improvements are given. (1 fig., 2 tables.)

immediate source clipping

GINZBURG, D.B., doktor tekhn. nauk; DELIKISHKIN, S.N., kand. tekhn. nauk;
KHODOROV, Ye.I., kand. tekhn. nauk; CHIZHSKIY, A.F., inzh.;
BUDNIKOVA, P.P., red.; SMIRNOVA, I., red.; PANCVA, L., tekhn. red.

[Furnaces and drying apparatus for the silicate industry] Pechi i su-
shila silikatnoi promyshlennosti. Pod red. P.P.Budnikova. Moskva,
Gos. izd-vo lit-ry po stroit. materialam, 1949. 483 p.

(MIRA 15:1)

1. Deystvitel'nyy chlen AN USSR (for Budnikova).
(Kilns)

GINZBURG, D.B., doktor tekhnicheskikh nauk.

Efficient technological diagram of gas power-plants and gas producer construction. Stek.1 ker. 10 no.9:27-31 8 '53. (MLA 6:8)
(Gas power-plants) (Gas generators)

KITAYTSEV, V.A.; GUNVICH, R.M.; KOROL'KOV, I.V.; GINZBURG, D.B., doktor
tekhnicheskikh nauk, professor, retsient; NIKOLAYEV, K.A., kandi-
dat tekhnicheskikh nauk, redaktor

[Heat engineering and heating installations in the building materials
industry] Teplo tekhnika i teplovye ustanovki v promyshlennosti
stroitel'nykh materialov. 3-e izd. perer. i dop. Moskva, Gos. izd-
vo lit-ry po stroitel'nykh materialam, 1954. 495 p. (MIRA 8:4)
(Heat engineering) (Building materials industry)

USSR/ Engineering- Glass furnaces

Card 1/1 Pub. 104 - 8/11

Authors : Ginsburg, D. E., Dr. of Techn. Sc., and Chernyakov, S. S.

Title : Utilization of the heat of waste gases discharged by glass furnaces

Periodical : Stak. 1 ker. 4, 22-25, Apr 1954

Abstract : It is shown that waste gases, discharged from glass furnaces, carry away 20 to 30% of the total heat, necessary for the fusion of glass. The heat of waste gases at their high temperature can be utilized for the generation of steam, boiling of hot water and heating of the air, and at low temperature the heat can be used for drying fuel with high moisture content, for the obtainment of warm water and many other purposes. The arrangements necessary for the entrainment of the hot gases and their utilization for profitable purposes, are described. One USSR reference (-).
Table, drawings.

Institution:

Submitted:

GINZBURG, D.B., doktor tekhnicheskikh nauk

The use of preheated blast in gas producers. Stek. 1 ker. 12 no. 9:8
S '55. (Gas producers) (MIRA 8:12)

GINZBURG, D.B., doktor tekhnicheskikh nauk; MAGIDSON, M.Ya., inzhener.

Tank furnace for the production of piece glassware. Leg.prom. 15
no.2137-40 P '55. (MIRA 8:4)
(Glass manufacture)

[illegible]

~~GINZBURG, David Borisovich~~, doktor tekhnicheskikh nauk; DELIKISHKIN, Sergey Nikolayevich, kandidat tekhnicheskikh nauk; KHODOROV, Yevgeniy Iosifovich, kandidat tekhnicheskikh nauk; CHIZHSKIY, Anatoliy Fedotovich, kandidat tekhnicheskikh nauk; ZIMIN, V.N., dotsent; retsenzent; KUZYAK, V.A., dotsent, retsenzent; NOKHRATYAN, K.A., kandidat tekhnicheskikh nauk, retsenzent; IVANOV, A.N., dotsent, retsenzent [deceased]; BUDNIKOV, P.P., redaktor; FRADKIN, A.Ye., kandidat tekhnicheskikh nauk, nauchnyy redaktor; GOL'DENBERG, L.G., inzhener, nauchnyy redaktor; GLEZAROVA, I.L., redaktor; GLADKIKH, N.N., tekhnicheskiy redaktor

[Furnaces and driers in the silicate industry] Pechi i sushila silikatnoi promyshlennosti. Izd. 2-oe, perer. Pod red. P.P.Budnikova. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1956. 455 p.
(MIRA 10:3)

1. Deyatvitel'nyy chlen Akademii nauk USSR (for Budnikov)
(Kilns) (Clay industries)
(Drying apparatus)

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Solid Mineral Fuels, I-12

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62545

Author: Ginzburg, D. B., Poluboyarinov, G. N.

Institution: None

Title: Present State and Development Prospects of the Technology of Solid Fuel Gasification

Original

Periodical: Gazovaya prom-st', 1956, No 12-17

Abstract: Presented are considerations as to the means of development of the current gas economy and gasification of solid fuels in connection with overhauling of available gas plants, change-over in some raw material processing procedures and provision of new large output gas generators operating with steam-oxygen blowing and fluid slag removal.

GINZBURG, D.B.; SHKALINKO, R.A.

Construction of a peat gas producer for large peat blocks. Gas. prom.
no. 4:6-10 Ap '56. (MIRA 10:1)

(Peat) (Gas producers)

GINZBURG, D. B.

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27646

Author : D.B. Ginzburg.

Inst :

Title : Rational Utilization of Fuel at Gasification in Glass Factories.

Orig Pub: Legkaya promyshlennost', 1956, No 9, 6-9.

Abstract: Attention is drawn to the unsatisfactory work and state of gas works in the gas industry of the Ministry of Light Industry of RSFSR following from the bad preparation of fuel for gasification (in particular of peat) and from the out-of-date construction of gas generators at the majority of glass factories. The author recommends a series of measures for improving peat (drying) and carrying out the gasification process (application of heated blast enriched with oxygen), as well as the utilization of the gasification principle of cut peat in a boiling layer. A

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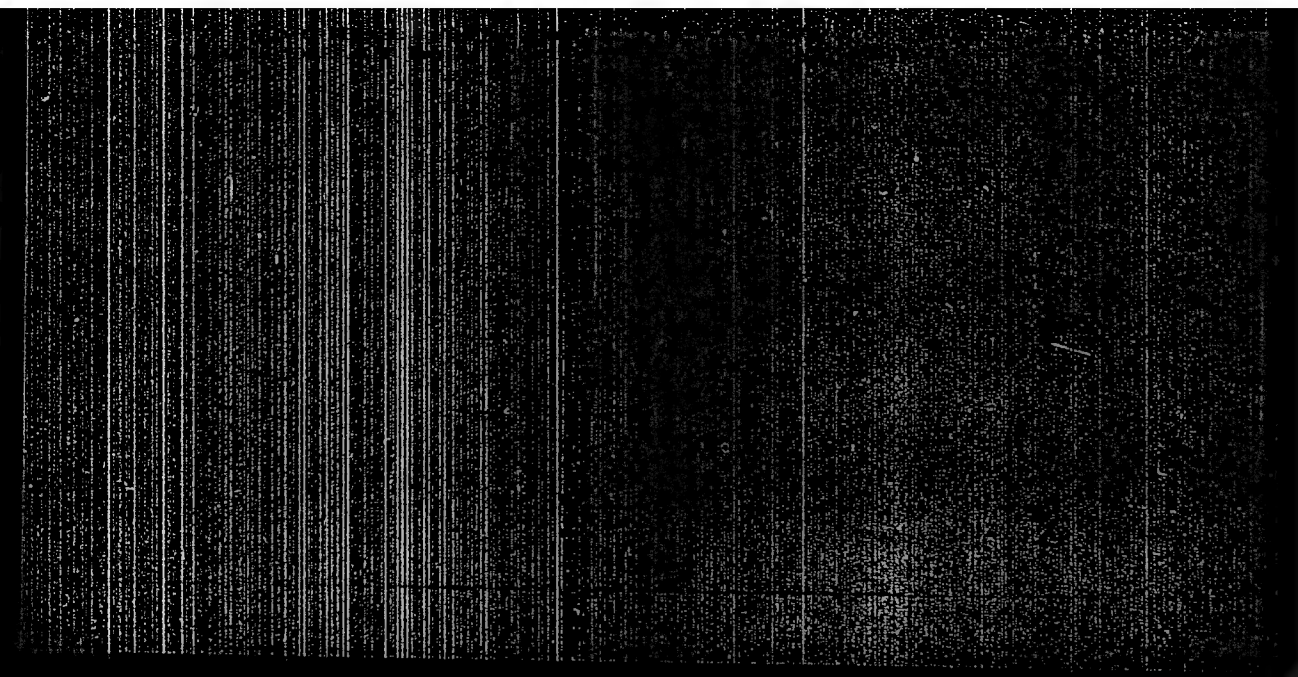
USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27646

blueprint of a gas work with preliminary drying of peat with waste gases from glass furnaces is attached, and the author describes some technological schemes of gas works guaranteeing a better utilization of the fuel at hand and the production of generator gas of higher calorie value, which will permit to raise the productivity of glass furnaces.

Card : 2/2

-47-



GINZBURG, D.B., doktor tekhnicheskikh nauk, redaktor; KANTOROVICH, B.V.,
doktor tekhnicheskikh nauk, professor, redaktor; FUFRE'ANSKIY, N.A.,
doktor tekhnicheskikh nauk, professor, redaktor; BARK, S.Ye., inzhener, redaktor; POLUBOYARINOV, G.N., inzhener, redaktor; MARTYNOVA, M.P.,
vedushchiy redaktor; IL'IN, B.M., tekhnicheskiiy redaktor

[Gasification of solid fuel; transactions of the 3rd scientific and technical conference] Gasifikatsiya tverdogo topliva; trudy tret'ei nauchno-tekhnicheskoi konferentsii. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1957. 373 p. (MLRA 10:4)

1. Nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti. Moskovskoye oblastnoye pravleniye.

(Coal gasification) (Gas producers)

(Peat gasification)

11(2,7)

PHASE 1 BOOK EVALUATION

11(2,7)

Ginzburg, D. B., Doctor of Technical Sciences

Gazifikatsiya tverdogo topliva (Gasification of Solid Fuel. Moscow, Gostroyizdat, 1958. 110 p. 2,400 copies printed.

Scientific Ed.: I. Ye. Arfinkel'; Ed. of Publishing House: M. G. Pal'kevich;
Tech. Eds.: T. A. Prusakova, and N. A. Budekova.

PURPOSE: This textbook is intended for operators of gas generating plants.

COVERAGE: The process of gasifying a solid fuel of various types is reviewed, and various types of gas generators used for this purpose are briefly described. Comparative characteristics of solid and liquid fuels are given, along with definitions of certain terms, substances and elements and a description of the gasification process. The content of gas produced is described and different types of gas generators with their most important parts are illustrated. Different methods of scrubbing and desiccating gas, as well as certain equipment of gas generators and gas lines are also

starting, handling and cleaning gas generators is explained. The author deals also with the organization of work at gas generating stations, the wage system duties of personnel, and safety techniques. Personalities are mentioned. There are no references.

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Card 6/6

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GINSBURG, D.B.; ZHEREBIN, S.I.

Effective utilization of gas in glass factories. Gaz. prom.
no.3:13-18 Mr '58. (MIRA 11:3)
(Glass manufacture) (Gas as fuel)

AUTHORS.

~~Ginzburg, B. S.~~, Doctor of Technical
Sciences, Leningrad, U. S. S. R.

1955 7 / 10

TITLE.

Rationalization of the Fuel Economy of the Gorkiy Glass
Works (*Ratsionalizatsiya toplivnogo khozyaystva Gork'kovskogo
stekol'nogo zavoda*)

PERIODICAL:

Steklo i keramika, 1956, ⁶ Nr 7, pp. 3-5 (USSR)

ABSTRACT:

Measures, the introduction of which is intended within 2 to 3 years, are investigated. The increase of the gas heating power, as well as the suspension of the conduction of the phenol containing waste waters into the river Volga are considered to be urgent. The gas heating power required for obtaining a certain output of glass mass, as well as the dependence of the efficiency of the kiln on the output of glass mass are given in figure 1. It is intended to increase the heating power of the generator gas by the addition of propane-and butane gas. Some properties of these gases are given in table 1 and are further described. The scheme of a device for the storage and transportation of a propane-butane mixture is shown in figure 2. The dependence of the gas yield and its heating power on the humidity content of peat may be seen in figure 3. The quanti-

tative ratio between the propane-butane mixture and the generator gas at various schemes of gas purification and utilization of tar in dependence on the humidity content of peat and on the heating power required by the mixture is given (Figs 4 to 9). Furthermore, 4 variants of using undried gas are given and described. The possibility and suitability of the drying of peat by means of exhaust gases was found by tests carried out by the Institute of Power Engineering AS of the BSSR (AS Belorussian SSR) (I.A. Lyuboshits and I.T. El'perin/Ref 1) and by the Institute of Gas Utilization, AS USSR (A.T. Tishchenko / Ref 2). For conveying the tar to the nozzle burner, the use of an oil-pumping outfit developed by TsNIITMash (Fig 10) is considered. The construction of the nozzle burner in which the fuel is sprayed by highly calorific gas, was proposed by the metallurgists N.M. Dobrovol'tov and N.N. Karp (Ref 1). It is also recommended to try out the nozzle burner developed by N.A. Zakharikov and A.I. Rodionov at the Institute of Gas Utilization AS USSR (Ref 1). Consequently the heating power of peat-generator gas may be increased by the addition of a propane-butane mixture and by artificial

Rationalization of the Fuel Economy of the Gor'kiy
Glass Works

304/72-58-7-2/19

drying. In the case of an enrichment of the gas by propane-butane and a utilization of the tar by burning in the kiln, a wet gas purification and draining of the waste waters may be dropped. The application of the heat from exhaust gases is of great importance for the drying of peat. There are 11 figures, 2 tables, and 4 Soviet references.

1. Glass--Production 2. Fuels--Costs 3. Gases--Properties

PLEASE I DON'T EXPECTATION

Экспериментальное исследование влияния температуры на свойства полимеров

Dr. B. B. Ginsburg, Doctor of Technical Sciences; Prof. Dr. I. I. Paryanenko; Tech. Ed. A. S. Pukosin.

NOTE: This collection of articles is intended for specialists engaged in designing and operating gas units of industrial enterprises and electric power plants.

VIEWPOINT: The change-over to some industrial enterprises from solid and liquid fuels to natural gas is discussed and further possibilities existing along this line are examined. Advantages of using natural gas as a source of energy are outlined. Different gas burner systems, devices for automatic control of the combustion process, structural features of furnaces operating on natural

gas, gas-supply systems and the introduction of safety measures in the construction and operation of gas units are described. The book contains many diagrams of gas-supply systems and equipment. No personalities are mentioned. One article is followed by references.

References

Abstract

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28(0)

AUTHOR:

Ginzburg, D. B., Doctor of Technical Sciences

SOV/72-52-1-5/16

TITLE:

Small-Scale High-Temperature Furnace (Malozabaritnaya vysokotemperaturnaya pech')

PERIODICAL:

Steklo i keramika, 1959, Nr 1, pp 1-17 (USSR)

ABSTRACT:

In the present paper a test furnace for research work is described which reaches temperatures of 1500 - 1750° and more, which is very important to the melting of high-melting glass and the firing of highly refractory products. It is a kerosene furnace with evaporation grates which is in use at the Moskovskiy khimiko-tekhnologicheskii institut imeni Mendeleyeva (Moscow Chemico-Technological Institute imeni Mendeleyev) and has a working volume of 0.3 m³. Figure 1 shows the furnace and figure 2 its characteristic working qualities. The results of the waste gas analysis may be seen in the table. There are 2 figures and 1 table.

ASSOCIATION:

Moskovskiy khimiko-tekhnologicheskii institut imeni Mendeleyeva (Moscow Chemico-Technological Institute imeni Mendeleyev)

GINZBURG, D.B.

Heat exchange in the melting tank of a glass furnace. Trudy MKHTI
no.27:172-196 '59. (MIRA 15:6)
(Glass furnaces) (Heat—Transmission)

GINZBURG, D.B.; FIGUROVSKIY, I.A.; SOBOLEVSKIY, S.I.

Efficiency promotion of the gas supply system at the Gusev
Crystal Glass Works. Gaz.prom. 4 no.9:22-26 S '59.

(MIRA 12:11)

(Gusev--Glass manufacture) (Gas producers)

15(2)

AUTHORS:

Ginzburg, D. B., Doctor of Technical Sciences SOV/72-59-7-9/19
Matveyev, M. A., Zharebin, S. I.

TITLE:

Increase of the Working Efficiency of Glass Melting Furnaces by
Sealing the Regenerative and Recuperative Systems (Povysheniye
effektivnosti raboty steklovarenykh pechey putem uplotneniya
regenerativnoy i rekuperativnoy sistem)

PERIODICAL:

Steklo i keramika, 1959, Nr 7, pp 26 - 30 (USSR)

ABSTRACT:

The authors of this paper and I. V. Lebedev (Footnote 1) found that the air excess in the tank furnace of the Gor'kiy glassworks amounts to 15% and of the Gusevo crystal works amounts to 23%. D. B. Ginzburg, M. Ya. Magidson (Footnote 2) found in the glassworks imeni Kalinin an air excess of $\alpha = 1.2$. Therefore the authors of this paper do not agree with the statement of V. A. Krechmar and M. G. Stepanenko (Footnote 4) that the burning in the furnace in the glassworks takes place with an air excess of $\alpha = 1.5$ till 1.7. The amount of gas passing the regenerators is calculated by means of equations which are given and explained. These informations for the Gor'kiy works were published already earlier, for the Gusevo crystal works they are represented in the figure. As it may be seen from it it is possible to attain considerable savings by making

Card 1/2

Increase of the Working Efficiency of Glass Melting Furnaces SOV/72-59-7-9/19
by Sealing the Regenerative and Recuperative Systems

sealing tight the regenerative system of a glass melting furnace among it 5 to 6% of the fuel consumption. The authors of this paper elaborated and tested two kinds of coatings, the silicate (OZh-4)- and the magnesia coating (OM-8). Their composition, manufacturing method and properties are exactly described. The coatings OM-8 and OZh-4 proved to be the best also in the sealing of surfaces with temperatures up to 300°. On account of the experience of the Gor'kiy glassworks the coating OZh-4 can be recommended for sealing burners, regenerators and recuperators of the glass melting furnaces. There are 1 figure and 6 Soviet references.

GINZBURG, D.B., doktor tekhn.nauk

Prospects for improving glass furnaces. Zhur. VKHO 5
no. 2:214-220 '60. (MIRA 14:2)
(Glass furnaces)

GINZBURG, D.B.

Glass melting processes. Stek. 1 ker. 17 no.8;10-12 Ag '60.
(MIRA 13:8)

(Glass manufacture)

KITAYGORODSKIY, I.I., doktor tekhn. nauk, prof.; KACHALOV, N.N., prof.;
VARGIN, V.V., doktor tekhn. nauk, prof.; YEVSTROP'YEV, K.S.,
doktor tekhn. nauk, prof.; GINZBURG, D.B., doktor tekhn. nauk,
prof.; ASLANOVA, M.S., doktor tekhn. nauk, prof.; GURFINKEL', I.Ye.,
inzh.; ZAK, A.P., kand. tekhn. nauk; KOTLYAR, A.Ye., inzh.; PAVLUSH-
KIN, N.M., doktor tekhn. nauk, prof.; Sentyurin, G.G., kand. tekhn.
nauk; SIL'VESTROVICH, S.I., kand. tekhn. nauk, dots.; SOLINOV, F.G.,
kand. tekhn. nauk; SOLOMIN, N.V., doktor tekhn. nauk, prof.; TEMKIN,
B.S., kand. tekhn. nauk; GLADYSHEVA, S.A., red. izd-va; TEMKINA, Ye.L.,
tekhn. red.

[Glass technology] Tekhnologiya stekla. Izd.3., perer. Moskva, Gos.
izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1961. 622 p.
(MIRA 14:10)

1. Chlen-korrespondent AN SSSR (for Kachalov).
(Glass manufacture)

GINZBURG, D.B., prof.; MATVEYEV, M.A., prof.

Conference on the improvement of the operational efficiency of
glass furnaces. Zhur.VKHO 6 no.4:458-461 '61. (MIRA 14:7)
(Glass furnaces--Congresses)

GINZBURG D.B.

GIZBURG, D.B.

Present-day practices in making producer gas and in using gas
producers in the U.S.S.R. Gaz. prom. 6 no.6:33-40 '61.

(MIRA 14:9)

(Gas producers)

GIUZEURG, D.B., prof., doktor tekhn.nauk

Improving the design and operation of glass-melting furnaces.

Stek. i ker. 18 no.10:12-18 0 '61.

(MIRA 14:11)

(Glass furnaces)

911.000.00.

Use of natural gas in the glass and ceramics industries. Gaz. prom.
C. 10.000.00. 02. (1911-1912)

GINZBURG, D.B.; KHAZAN, Ye.A.

Effect of temperature on the intensity of glassmaking. Trudy

MKHTI no.37:106-111 '62. (MIRA 16:12)

GINZBURG, D.B., doktor tekhn.nauk, prof.

Improving the design of tunnel kilns. Stek. i ker. 19 no.6:
18-25 Je '62. (MIRA 15:7)
(Kilns)

GINZBURG, D.B., doktor tekhn.nauk, prof.; MATVEYEV, M.A., doktor tekhn.
nauk, prof.; KUKSIN, I.I., inzh.

Rapid glass founding. Stek.l ker. 19 no.11:4-7 N '62.
(MIRA 15:12)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.
Mendeleeva.

(Glass manufacture)

GINZBURG, D.B., doktor tekhn. nauk, red.; SVYATITSKAYA, K.P., ved.
red.; YAKOVLEV, Z.I., tekhn. red.

[Use of natural and liquefied gases] Ispol'zovanie pri-
rodnogo i szhizhnogo gazov. Moskva, Gostoptekhnizdat,
1963. 241 p. (MIRA 16:10)

(Gas burners)

GINZBURG, David Borisovich, doktor tekhn. nauk; DELIKISHKIN, Sergey Nikolayevich, kand. tekhn. nauk; KHODOROV, Yevgeniy Iosifovich, kand. tekhn. nauk; CHIZHSKIY, Anatoliy Fedorovich, kand. tekhn. nauk; BUDNIKOV, P.P., akademik, red.; DOBROKHOTOV, N.N., akademik, nauchn. red. [deceased]; KOSYAKINA, Z.K., red.; BOROVNEV, N.K., tekhn. red.

[Kilns and drying apparatus for the silicate industry] Pechi i sushilki silikatnoi promyshlennosti. [By] D.B. Ginzburg i dr. Izd. 3., perer. Moskva, Gosstroizdat, 1963. 342 p.

(MIRA 17:2)

1. Akaderiya nauk Ukr. SSR (for Budnikov).

BEREZHIROY, A.I.; BRODSKIY, Yu.A.; BRONSHTEYN, Z.I.; VEYNSBERG, K.L.;
GALDINA, N.M.; GLETMAN, B.A.; GINZBURG, L.B.; GUTOP, V.G.;
GUREVICH, L.R.; DAUVAL'TER, A.R.; YEGOROVA, L.S.; KOTLYAK,
A.Ye.; KUZIAK, V.A.; MAKAROV, A.V.; POLIYAK, V.V.; POPOVA,
E.M.; PRYANISHNIKOV, V.P.; SENTRYURIN, G.G.; SIL'VESTROVICH,
S.I., kand. tekhn. nauk, dots.; SOLOMIN, B.V.; TEMKIN, B.S.;
TYKACHINSKIY, I.D.; SHIGAYEVA, V.P.; SHLAIN, I.B.; EL'KIND,
G.A. [deceased]; KITAYGORODSKIY, I.I., zasl. deyatel' nauki i
tekhniki RSFSR, doktor tekhn. nauk, prof., red.; GOMGZOVA,
N.A., red. izd-va; KOMAROVSKAYA, L.A., tekhn. red.

[Handbook on glass manufacture] Spravochnik po proizvodstvu
stekla. [By] A.I. Berezhnoi i dr. Pod red. I.I. Kitaigorodskogo
i S.I. Sil'vestrovicha. Moskva, Gostroiizdat. Vol. 2. 1963.
115 p. (MIRA 16:12)

(Glass manufacture)

GINZBURG, D.B., doktor tekhn. nauk; RAPOPORT, A.Ya., inzh.

Improving the design of furnaces with necks. Stek. i ker.
20 no.8:1-7 Ag '63. (MIRA 16:11)

1. Moskovskiy khimiko-tekhnologicheskoy institut imeni
D.I. Mendeleeva (for Ginzburg).

GINZBURG, D.B., doktor tekhn. nauk; BRAGINSKIY, K.I., inzh.

"Heat exchange processes in glass furnaces" by N.A. Zakharikov.
Reviewed by D.B. Ginzburg. Stek. i ker. 20 no.12:40-42 D '63.
(MIRA 17:1)

BARENBOYM, A.M., kand. tekhn. nauk; GALIYEVA, T.M., inzh.;
GINZBURG, D.B., prof.; GRISSEK, A.M., inzh.; ZIMIN, V.N.,
dokt.; KUSYAK, V.A., kand. tekhn. nauk; RUTMAN, E.M.,
inzh.; KHODOROV, Ye.I., kand. tekhn. nauk; CHIZHICKIY,
A.F., kand. tekhn. nauk

[Heat calculations for furnaces and dryers of the silicates
industry] Teplovye raschety pechei i sushilok silikatnoi
promyshlennosti. Izd.2., perer. i dop. Moskva, Stroiz-
dat, 1964. 495 p. (MIRA 17:12)

GINZBURG, D.G.

Review of the book by G.N.Rovinski and others "Cold pressing
in machine construction". Avt. i trakt. prom. no.11:31-32 N
'55. (MLRA 9:2)

1.Ger'kovskiy filial Gipreavtoprema.
(Sheet metal work)

GINZBURG, D.G.

Waste products in metal pressing: recovery and utilization. Avt.
1 trakt.prom. no.8:29-33 Ag '56. (MLRA 9:10)

1. Gor'kovskiy filial Gipromtoprom.
(Sheet-metal work) (Waste products)

GINZBURG, D.O.

Designing cold stamping plants. Avt. i trakt. prom. no.9:37-39 S '56.
(MLRA 9:11)

1. Gor'kovskiy filial Giprocavtoprom.
(Sheet-metal work) (Automobile industry)

GINZBURG, D.G.

Organizing the conveying and intermediate storage of parts in
automobile body pressing shops. Avt.1 trakt.prom. no.9:32-36 S '57.
(MIRA 10:11)

1. Gor'kovskiy filial Giproavtoproma.
(Automobiles--Bodies) (Sheet-metal work)

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Industrial Automobiles by International, 1944, pp. 11, 17-17 (USSR)

2000000 The author describes the language habits of English and French first (British and French (Killing) in England, and secondly in France) in, automatic stamping of large parts of our bodies. There are 1 section, 1 group and 1 reference, 1 of which is Soviet, 1 of English and 1 French.

...the

Card 1/1 1. Automobile Industry-Product for method

GINZBURG, D.G.

New body-stamping shops (from foreign publications). Kuz.-shtam.
proiz. 1 no.7:29-33 J1 '59. (MIRA 12:10)
(Sheet-metal work) (Automobile industry)

67511, D. 1.

Gorban', A. I. and Sinzhen', I.M. "Direct transformation
of soda into sodium hydroxide by the action of water vapor",
Trudy Khimich. in-ta s. Khim. prom-sti, Vol. 7, 1967,
229-2, - Bibliog. : 12 items.

SO: 8-831, 1. Sept. 67, (Letopis 'Zhurnal' Khim. Soderzh., No. 2, 1967).

Card 1/1

Author : Mikhaylov, F. K. Cand Tech Sci; Ginzburg, D. M. Cand Chem Sci; and N. I. Tsosin

Title : The heat conductivity of carbonate rocks and of calcium oxide in lumps

Periodical : Khim. prom. 3, 44-46 (172-174), April-May 1954.

Abstract : The average heat conductivities of samples of chalk, limestone, and calcium oxide from chalk used at USSR soda plants have been determined. Formulas for the calculation of the true heat conductivities of these samples are given. These formulas can be used for samples of the materials investigated derived from other deposits, if the volumetric weights are close. The temperature conductivities of the 3 materials have been computed. Illustrated by 3 figures. Data are listed in 4 tables. 7 USSR references are appended, 2 of them to foreign books translated into Russian.

Institution : All-Union Institute of the Soda Industry

GINZBURG, D. M.

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. B-8
Equilibrium. Physicochemical Analysis. Phase Transitions.

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 7441

Author : Ginzburg, D.M.

Inst : Institute of the Soda Industry

Title : On the Thermodynamic Properties of the Carbonates and
Oxides of Calcium and Magnesium

Orig Pub : Tr. Vses. in-ta sodovoy prom-sti, 1955, Vol 8, 103-108

Abstract : A critical discussion is given of the literature data
concerning the heat effects during the thermal decomposition
reactions of CaCO_3 and MgCO_3 . The most reliable
values for ΔH° , ΔZ° , ΔS° , and ΔG° for CaCO_3 , CaO ,
 MgCO_3 , and MgO are tabulated.

Category : USSR/Atomic and Molecular Physics - Statistical physics. Thermodynamics S-3

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 854

Author : Ginzburg, D.M.

Title : On the Thermodynamic Characteristic of NaOH, Na_2CO_3 , and Na_2SO_4
at High Temperatures.

Orig Pub : Zh. obshch. khimii, 1956, 26, No 4, 968-970

Abstract : No abstract

Card : 1/1



USSR/Thermodynamics - Thermochemistry. Equilibria.
Physical-Chemical Analysis. Phase Transitions.

B-8

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18443
Author : M.M. Popov, D.M. Ginsburg.
Title : Specific Heat of Na_2CO_3 , Na_2SO_4 and NaOH at High Temperatures.
Orig Pub : Zh. obshch. khimii, 1956, 26, No 4, 971-980

Abstract : The mean specific heat of chemically pure Na_2CO_3 (within the range from 20 to 1106.6°), Na_2SO_4 (within the range from 20 to 1017.1°), and NaOH (within the range from 20 to 742.8°) containing 98.79% of NaOH, 1.2% of Na_2CO_3 and 0.01% of impurities was measured by the method of mixing in a massive calorimeter. Equations are given for the computation of the mean and true heat capacity (specific and molar) of these substances. The melting heat of Na_2CO_3 , Na_2SO_4 and NaOH were computed and they proved to be -7303, -5770 and -1629.3 cal/mol

Card 1/2

SOV/137-57-6-9526

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 29 (USSR)

AUTHORS: Novakovskiy, M.S., Ginzburg, D.M., Ponirovskaya, L.I.

TITLE: The Solid-phase Reaction Between Calcium Oxide and Aluminum Oxide (O vzaimodeystvii okisi kal'tsiya s okis'yu alyuminiya v tverdoy faze)

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1956, Nr 71, pp 103-106

ABSTRACT: A thermodynamic analysis is made of the reactions of formation of $\text{CaO} \cdot \text{Al}_2\text{O}_3$, $2\text{CaO} \cdot \text{Al}_2\text{O}_3$ and $3\text{CaO} \cdot \text{Al}_2\text{O}_3$ from $\text{CaO} + \text{Al}_2\text{O}_3$ in the solid phase. As temperature rises, the first to form is $\text{CaO} \cdot \text{Al}_2\text{O}_3$, followed by enlargement of the crystals and an increase in the amount of compound. When the crystals attain a given size, the formation of a new compound (apparently $5\text{CaO} \cdot \text{Al}_2\text{O}_3$) begins. However, at all temperatures, the end product of the reaction of CaO and Al_2O_3 is $3\text{CaO} \cdot \text{Al}_2\text{O}_3$.

S.G.